

### **Norfolk Island Pine Recovery from Hurricane Charley**

With maximum sustained winds of 150 mph, Hurricane Charley roared through southwest Florida on the 13th of August, 2004. The Category 4 storm devastated many trees including Norfolk Island Pines. Several months after the storm, Lee County Extension continued to receive many calls on the prognosis for recovery of Norfolk Island pines. The branches of the worst affected trees were completely stripped from their trunks. Some trees have made good recoveries and some will never recover. Here are answers to the question posed in 2004. This is a photo essay of some of those affected trees.



Pine Island, 22 December, 2004



Pine Island, 2 May, 2011

The trunk at the top of the tree below was broken in the hurricane. No new growth has emerged from this tree above the point of severance.



Looking west, Captiva, 25 August, 2004



Same tree, Looking east, Captiva, 4 May, 2011.



Severance point of same tree, Captiva, 25 August, 2004





Sanibel, August, 2004



Sanibel, August, 2005



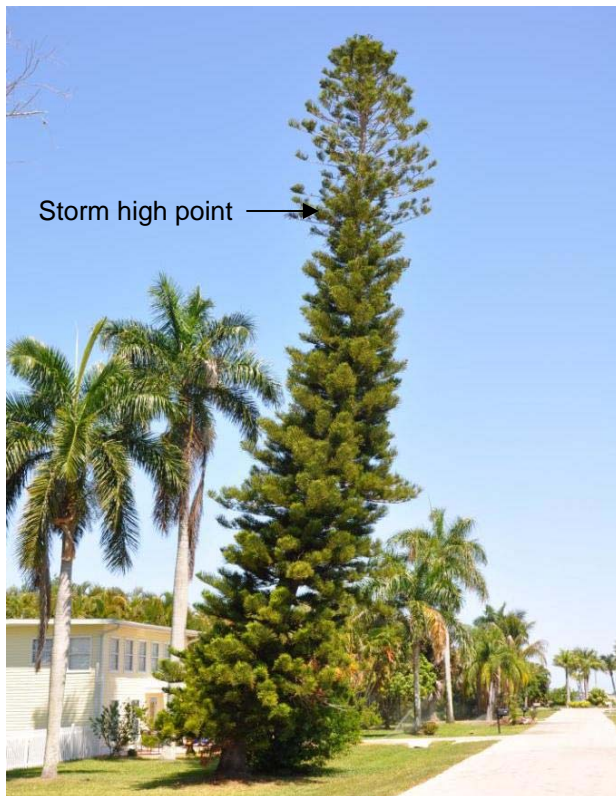
Sanibel, November, 2007



Sanibel, February, 2011



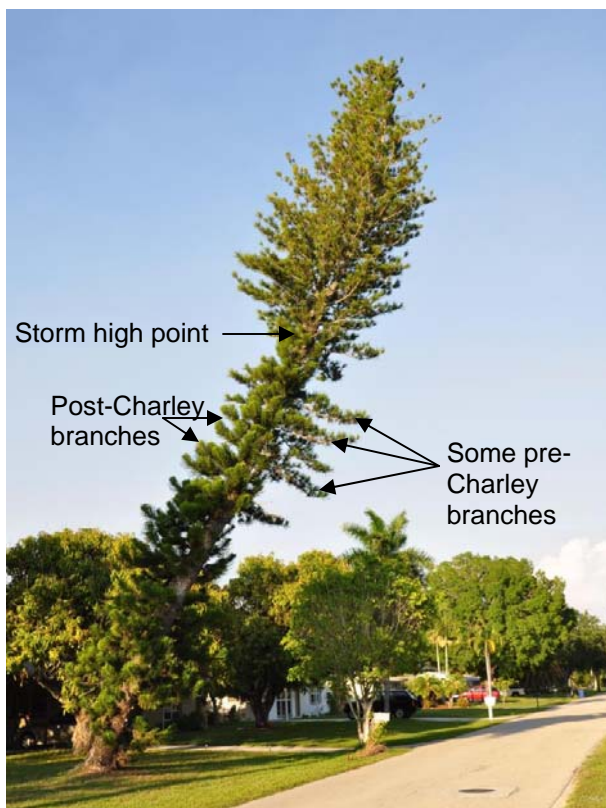
More commonly, damaged trees recovered with the new branches on the stripped (pre Charley) trunks being shorter and thicker than the new branches on the upper trunks. The latter formed after the hurricane; thus establishing a clear demarcation point between pre and post hurricane growth. The point of demarcation I've termed the "storm high point."



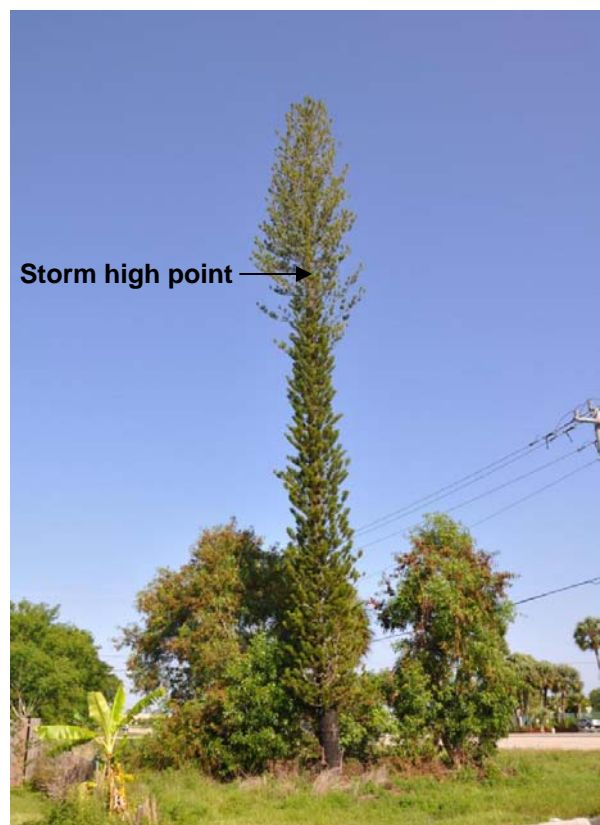
Near the Iona area, Lee County, 22 April, 2011



Fort Myers, 23 January, 2011



Fort Myers, 27 April, 2011



Cape Coral, 2 May, 2011



Normal appearing tree, minimal storm affect, Fort Myers, 2 January, 2010



Normal appearing tree, minimal storm affect, South Lee County, 22 April, 2011

All pictures taken by Stephen H. Brown

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